

Remarks

It is believed that the following remarks attend to all rejections presented in the pending May 11, 2005 office action. Claims 10-31 thus remain pending in the application, of which claims 10 and 16 are independent. Claims 27-31 are amended to correct dependencies on claim 10.

Claim Rejections under 35 U.S.C. § 103

Claims 10-13, 15-17, 19-20, 22, 23-26 stand rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,643,608 ("Hershey") in view of U.S. Patent No. 4,745,564 ("Tennes"). Respectfully we disagree, since, among other reasons, Hershey and Tennes do not teach or suggest each and every claim limitation of the claims.

The Examiner has repeatedly made reference to a "simulated product" within his comments in the present office action (for example, the Examiner comments as follows: "Hershey et al. does not specify that the subsystems should comprise a simulated product"). The problem is, we do not understand how or why this is relevant. The claims of this pending application do not include the term "simulated product" and nor do the claims intend to mean a "simulated product." The Examiner also for example discusses how Tennes discloses monitoring devices in the "form of shipping objects" – but this has nothing to do with the present claim set. Claim 10, for example, discloses that one or more sensors attach to the product, a real product (not a simulated one).

The Examiner then refers to the *Nerwin* case in stating that "the mere fact that a given structure is integral does not preclude its consisting of various elements." Respectfully, we also do not consider this relevant to these claims. The situation at hand is, for example, where sensors attach to a product (claim 10), not where the sensors themselves "consist" of various elements.

We respectfully ask then that the Examiner again fully reconsider Tennes and Hershey in the context of the claims as existing and the comments which follow.

The following is a quotation from the MPEP setting forth the three basic criteria that must be met to establish a *prima facie* case of obviousness:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion of motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine the reference teachings. Second, there

must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP, §2142, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Claim 10 requires the following step elements in a method for establishing product integrity after shipment from one location to another location:

- (A) attaching one or more smart sensors to the product,
- (B) monitoring environmental conditions of the product via the sensors and during shipment, wirelessly communicating the conditions from the sensors to a receiver at the second location, and
- (C) communicating the conditions from the receiver to a third location.

Hershey discloses a system for "collecting and analyzing" shipment parameter data that affects predicted statistical variables (e.g., life expectancy, warranty costs). Hershey, abstract. The system is made up of a plurality of data collection subsystems for collecting shipment parameter data from a like plurality of articles within a container. A data analysis subsystem uses data from the data collection subsystems to adjust "the respective predicted statistical variables" of the articles. *Id*; see also Hershey FIG. 2.

Each of Hershey's data collection subsystems (12, 14, 16) includes one container and all data collection subsystems either communicate with one data analysis subsystem (20) or to one location: "Data analysis subsystem 20 is coupled to receive the collective shipment data from the plurality of data collection subsystems...", *Hershey*, col. 3, lines 4-6 (*emphasis added*). Or, raw or analyzed data is sent to a service center, *Hershey*, col. 3, lines 25-29.

Hershey does not, therefore, disclose, anywhere, the attachment of one or more sensors directly on the product or article, as required by claim 10. Hershey in fact teaches away from the invention by disclosing a data collection subsystem that includes (a) a container and (b) *multiple* sensors located *in the* container that contains the articles to be shipped. See Hershey, col. 3, lines 17-67. Hershey also never discloses that *one or more* sensors attach directly to articles within the containers, as required by step (A) of claim 10.

Moreover, it is telling that Hershey also does not teach step elements (B) and (C) of claim 10. For example, step (B) requires wireless communications at the second location to a receiver and step (C) requires communicating data from the receiver to a third location. Hershey does not, - by any reasonable measure – disclose wirelessly communicating data from *one or more*

sensors to a receiver and then transmitting that data *from the receiver to a third location*. In figures 2 and 3 of Hershey, for example, a single data collection subsystem 20 is shown and that subsystem is either local to data collection subsystems 12, 14, 16 or it is remote from these subsystems. See Hershey, col. 3, lines 4-16. In an alternative embodiment, Hershey discloses local data analysis (on board) that is transmitted directly to a service center. See, Hershey, Col. 3, lines 20-29. Hershey thus never discloses an intermediate receiver and communications that occur locally, at the second location (by wireless communications), and then remotely (e.g., over the Internet from the receiver to the third location), as claimed in claim 10 and for example described in paragraph [0372] in the present application (see "interrogating device 1620").

Tennes discloses impact detection apparatus that measures and records accelerations exceeding a predetermined threshold. Data stored in memory is read via a serial port. See Tennes abstract.

Accordingly, we first note that Tennes only discloses acceleration, and that acceleration is in three axes. Tennes, col. 2, lines 65-67. Tennes has no disclosure or teaching of wireless communications (step B above) nor of communicating the data to a third location (step C above).

The Examiner argues that motivation to combine Tennes with Hershey is "obvious" to one skilled in the art. Although we disagree, the combination of Tennes and Hershey nonetheless fails 35 U.S.C. §103 for several reasons: First, there still must be motivation or suggestion within Tennes/Hershey to modify the disclosures to render claim 10, since clearly (based on the above arguments) the combination of Tennes/Hershey does not teach the elements of claim 10 (as argued above, Hershey and/or Tennes do not disclose or suggest steps A-C). For the reasons set forth above, therefore, a combination of Tennes with Hershey not only does not teach or suggest the elements of claim 10, one cannot reasonably modify Tennes and/or Hershey to render claim 10 with likelihood of success. Furthermore, we specifically ask for evidence pursuant to MPEP §2144 supporting the Examiner's contention of obviousness; this request is particularly pertinent because Tennes/Hershey do not, alone or in combination, teach the elements of claim 10.

Claims 11-13, 15 and claims 27-31 depend from claim 10 and benefit from like arguments. But, these claims have additional features that patentably distinguish over Tennes and/or Hershey. For example, as noted above in connection with steps B and C, Tennes and Hershey clearly fail to disclose interrogating the sensors at the second location with the receiver before wirelessly communicating the data, as in claim 12. In claim 15, temperature is monitored; but Tennes has no teaching or disclosure of temperature and only discusses acceleration; and

Hershey mentions temperature but not "preset temperature guidelines" as in claim 15 nor the basic step elements of claim 10.

Briefly, new claims 27-31 are also not disclosed by Hershey and/or Tennes, including:

- attaching a plurality of *identical smart sensors*, as in claim 27 (note, e.g., that Hershey in fact teaches away from this feature since Hershey's data collection subsystems 12, 13, 16 are for measuring different factors).
- storing and time-tagging event occurrences that exceed performance specifications of the product, as in claim 29;
- attaching a plurality of accelerometers to the product, wherein the environmental conditions comprise impact of the product, as in claim 30 (note for example that Tennes discloses only a single tri-axial accelerometer and not a plurality of separate accelerometers that attach to the product);
- sticking the sensors onto the product, as in claim 31.

Reconsideration and allowance of claims 10-13 and 15 is thus requested.

Independent claim 16 requires the following elements in a system for determining integrity of a product through shipment:

- (A) one or more smart sensors for attachment to the product and
- (B) an interrogating device, the sensors monitoring environmental conditions of the product during shipment and wirelessly communicating data about the conditions to the interrogating device during or after shipment, the interrogating device communicating the conditions over a network.

For the reasons outlined above, Tennes and/or Hershey fail to disclose, at least: wireless communications to an interrogating device and then communication to a third location over a network.

Claims 17, 19-20, 22, 23-26 depend from claim 16 and benefit from like arguments; but again these claims have features which patentably distinguish over Hershey and/or Tennes, including, at least:

- the environmental conditions comprising a preset temperature, as in claim 23;
- a plurality of interrogating devices to capture the conditions during shipment and after shipment (note that this feature, among others, is entirely absent from Hershey and/or Tennes).

Reconsideration of claims 16-17, 19-20, 22, 23-26 is thus requested.

Claim 18 stands rejected as being obvious in view of Hershey and Tennes in view of U.S. Patent No. 6,125,686 ("Haan"). We again disagree. For the reasons set forth above, Tennes and Hershey do not disclose the elements of claim 16, from which claim 18 depends. Haan too does not disclose these elements. Haan merely discloses a hand-held receiving unit but does not teach or suggest the other elements. Reconsideration of claim 18 is thus requested.

Claim 14 stands rejected as being obvious in view of Hershey and Tennes in view of U.S. Patent No. 4,862,394 ("Thompson"). We again disagree. For the reasons set forth above, Tennes and Hershey do not disclose the elements of claim 10, from which claim 14 depends. Thompson discloses only a drop height recorder, and also fails to disclose the elements of claim 10. Reconsideration of claim 14 is thus requested.

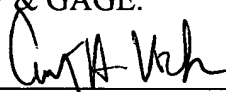
We have thus argued each of the pending issues and rejections in the pending office action. Reconsideration and allowance of all claims are now requested. The Examiner's comments in paragraph 6 of the pending office action is noted, but traversed in view of the above arguments. This response is filed within four months of filing a notice of appeal (dated July 26, 2005), and so a two month extension of time is required. Other than the two month extension of time, it is believed that no fees are due in connection with this amendment. If any fee is however due in connection with this response, please charge Deposit Account No. 12-0600.

We request that the Examiner contact the undersigned for a telephonic interview if any claims will still be rejected or if prosecution of the application may be expedited thereby.

Respectfully submitted,

LATHROP & GAGE.

By



Curtis A. Vock, Reg. 38,356
4845 Pearl East Circle, Ste. 300
Boulder, Colorado 80301
720-931-3000
720-931-3001 (fax)